This chapter discusses the operating procedures for the following:

- 4.1 Isabella MOA/ATCAA
- 4.2 Owens MOA/ATCAA
- 4.3 Saline MOA/ATCAA
- 4.4 Panamint MOA/ATCAA

This chapter covers the following for each specific work area:

- Description and Operations
- Special Considerations
- Dimensions

The scheduling agency for these MOAs/ATCAAs is the CCF:

Hours of Operation		Contact Numbers
0600–1800 M-F	Phone:	DSN 527-2508 (661) 277-2508
	Fax:	DSN 527-4798 (661) 277-4798
	E-mail:	2508CCF@edwards.af.mil

Published hours of activation for all MOAs and ATCAAs are:

Monday to Friday 0600–2200L, All other times by NOTAM.

#### 4.1 Isabella MOA/ATCAA

### 4.1.1 Description and Operations

The Isabella MOA covers 200 feet AGL to FL180 and the ATCAA covers FL180 to FL600 (see Figures 2-1 and 2-2). Isabella is typically used for the following activities:

- Primary holding point for armed aircraft using R-2505 and test aircraft using R-2524 Research, Development, Test, and Evaluation (RDT&E) and Operational Test and Evaluation (OT&E)
- Rapid maneuvering and ACM conducted over Saltdale/Koehn Lake (heavy use by Edwards AFB at all altitudes)
- Arrivals and departures from NAWS China Lake (R-2505)
- Orbit of refueling aircraft in support of restricted area operations
- Crossing of several Military Training Routes (MTRs) (see Figure 4-2)

### 4.1.2 Invokern Transition Area

The Inyokern Transition Area (ITA) (Figure 4-1) is an area in the Isabella MOA developed to segregate FAR Part 121 (Air Carrier) aircraft from Complex users.

All participating aircraft are excluded from the ITA between (all times Local) 0500-0700, 1100-1300, and 1800-2400 daily, unless specifically approved by ATC.

During published operating hours, you may request the use of the ITA in two ways:

- 1. **Request transit of the ITA**. This is a request to cross the area on a one-time basis.
- 2. **Request to operate within the ITA**. This is a request to allow an aircraft to operate within the area for a given amount of time. The clearance to operate within the ITA will normally be given with a void time (time that the aircraft must be clear of the transition area).

NOTE: All clearances (i.e., Isabella, Sage 2, and Pancho 2) specifically exclude the ITA between (all times Local) 0500-0700, 1100-1300, and 1800-2400, daily.

The Part 121 aircraft makes six flights to and from Inyokern each day (three arrivals and three departures). Each flight takes approximately 15 to 20 minutes to transit the ITA.

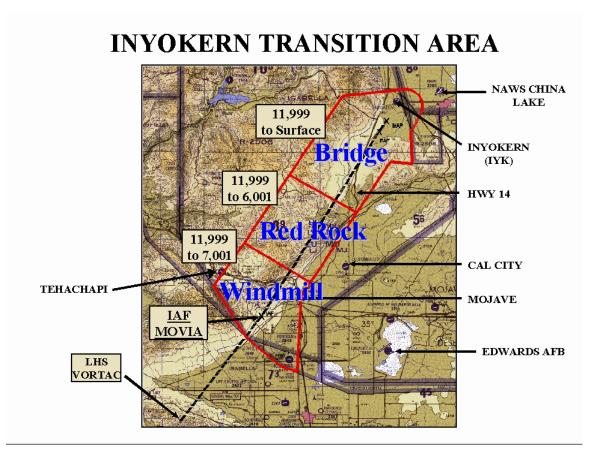


Figure 4-1. Inyokern Transition Area.

### 4.1.3 Special Considerations

#### Aircraft use the Edwards AFB local altimeter.

Altitudes in the MOA exclude the airspace up to and including 3,000 feet AGL floor over Domeland Wilderness Area, as it existed in 1977. The airspace also excludes the airspace up to and including 1,500 feet AGL within a 3 NM radius of the following airports:

- Rosamond
- Inyokern-Kern County
- Sacatar-Meadows

• Lloyds

- Kelso Valley Ranch
- Mountain Valley

- California City
- Flying S Ranch

Kern County

- Tehachapi
- Kern Valley

<sup>\*</sup>The MOA excludes the airspace up to and including 4,800 feet MSL within a 4.3 NM radius of the Mojave Airport, excluding that airspace east and parallel to a line ½ mile west of R-2515.

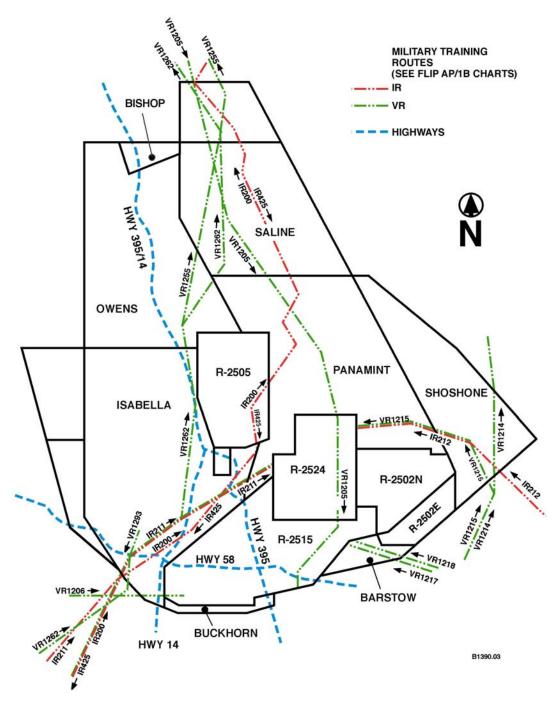


Figure 4-2. Military Training Routes (MTRs) and Highways.

Also, see Chapter 7, *R-2508 Complex Description and Use*, for more details concerning the following activities:

- Sailplane
- Ultralight
- General aviation VFR Transit routes (see Figure 7-3)
- Parachute
- Land Management helicopters and fixed-wing aircraft
- Populated areas: Inyokern, Lake Isabella, Kernville, Johannesburg, Randsburg, California City, Mojave, Sacatar (see Figure 7-6)
- Mojave Airport Class "D" Airspace
- Randsburg Mine (blasting)
- Trona Controlled Firing Area (CFA/Trona Corridor)
- Severe Weather Area (3) (see subsection 3.2.1)

#### 4.1.4 Dimensions

The dimensions of the **Isabella MOA** are:

Thence direct to the point of beginning.

Beginning at	36°08'00"N/118°35'03"W;
thence direct	36°08'00"N/117°53'03"W;
thence south and east	along the boundary of R-2505 to
	35°39'15"N/117°29'26"W;
thence direct	35°21'00"N/117°38'33"W;
thence direct	35°19'20"N/117°38'33"W;
thence along the wester	ern boundary of R-2515 to
	34°49'40"N/118°05'48"W;
thence direct	34°48'00"N/118°05'48"W;
thence direct	34°51'00"N/118°14'03"W;
thence direct	34°56'00"N/118°21'03"W;
thence direct	35°15'00"N/118°35'03"W;

## Dimensions for the Invokern Transition Area and its subdivisions are:

**Inyokern Transition Area:** The starting point is the established Inyokern Shelf. Point A is the eastern most point at which an aircraft could be to complete the approaches.

Beginning at point B	35°41'30"N/117°48'50"W	Ref. IYK Shelf
thence a 3 NM arc from point A	35°38'30"N/117°48'30"W	Ref. IYK Shelf
to point C	35°37'30"N/117°45'00"W	Ref. IYK Shelf
thence direct point D	35°33'45"N/117°47'20"W	Ref. IYK Shelf

thence direct point E	35°28'00"N/117°47'03"W	Ref. FAAO 7400.8
thence direct point F	35°28'15"N/117°51'30"W	
thence direct point G	35°19'00"N/117°58'30"W	
thence direct point H	35°06'20"N/118°08'03"W	
thence direct point I	35°03'50"N/118°10'00"W	
thence direct point J	34°50'00"N/118°10'50"W	
thence direct point K	34°51'00"N/118°14'03"W	Joint Use Letter of
thence direct point L	34°56'00"N/118°21'03"W	Procedure
thence direct point M	35°05'40"N/118°28'00"W	
thence direct point N	35°13'25"N/118°21'45"W	
thence direct point O	35°25'55"N/118°12'25"W	
thence direct point P	35°40'20"N/118°01'20"W	
TEN 11		

Thence direct to point B (the point of beginning).

## The following areas divide the ITA by altitude and protect descent on the approaches:

**Windmill Area:** The airspace from the Southwest boundary of the transition to a point 4 NM southwest of the 25-NM fix from ATLIS. The protected airspace is from 11,999 MSL to 7,001 MSL. Complex aircraft can be at and below 7,000 MSL or at and above 12,000 MSL. (Ref. FAAH 7110.65, paragraph 9-4-2.)

Beginning at point H	35°06'20"N/118°08'03"W	
thence direct point I	35°03'50"N/118°10'00"W	
thence direct point J	34°50'00"N/118°10'50"W	
thence direct point K	34°51'00"N/118°14'03"W	Joint Use Letter of
thence direct point L	34°56'00"N/118°21'03"W	Procedure
thence direct point M	35°05'40"N/118°28'00"W	
thence direct point N	35°13'25"N/118°21'45"W	
Thence direct point H (the point of beginning).		

**Red Rock Area:** This is airspace from 4 NM southwest of the 25 NM fix from ATLIS to 4 NM southwest of the 10 NM fix from ATLIS. The protected airspace is from 11,999 MSL to 6,001 MSL. Complex aircraft can be at and below 6,000 MSL or at and above 12,000 MSL.

Beginning at point G	35°19'00"N/117°58'30"W
Thence direct point H	35°06'20"N/118°08'03"W
Thence direct point N	35°13'25"N/118°21'45"W
Thence direct point O	35°25'55"N/118°12'25"W

Thence direct point G (the point of beginning).

**Bridge Area:** This is airspace from 4 NM southwest of the 10NM fix from ATLIS to the Northeast boundary of the transition area. The protected airspace is from 11,999 MSL to surface. Complex aircraft can be at and above 12,000 MSL.

Beginning at point B	35°41'30"N/117°48'50"W	Ref. IYK Shelf
Thence a 3 NM arc from point A	35°38'30"N/117°48'30"W	Ref. IYK Shelf
to point C	35°37'30"N/117°45'00"W	Ref. IYK Shelf
Thence direct point D	35°33'45"N/117°47'20"W	Ref. IYK Shelf
Thence direct point E	35°28'00"N/117°47'03"W	Ref. FAAO 7400.8D
Thence direct point F	35°28'15"N/117°51'30"W	
Thence direct point G	35°19'00"N/117°58'30"W	
Thence direct point O	35°25'55"N/118°12'25"W	
Thence direct point P	35°40'20"N/118°01'20"W	

Thence direct point B (the point of beginning).

## 4.2 Owens MOA/ATCAA

## 4.2.1 Description and Operations

The Owens MOA covers 200 feet AGL to FL180 and the ATCAA covers FL180 to FL600. The Bishop MOA underlies the northeast corner of the airspace under the Owens ATCAA. Be aware of the difference in airspace size.

Owens is typically used for the following activities:

- OT&E/RDT&E, ACM, and training by units from NAS Lemoore, NAWS China Lake, Fresno ANG, and Edwards AFB
- Crossing of several MTRs (see Figure 4-2)
- Marshalling or holding points for large-scale strikes departing AR625 into R-2508

**NOTE:** Owens MOA/ATCAA has the <u>highest density</u> of military use within the Complex. Aircrews should use caution in crossing the Owens Valley east to west/west to east. Typical operations run north to south with multiple aircraft operating at varying altitudes.

#### 4.2.2 Special Considerations

Aircraft use the China Lake local altimeter.

Altitude excludes 3,000 feet AGL floor over Kings Canyon National Park, Sequoia National Park, and John Muir Wilderness Area. Altitude also excludes 1,500 feet AGL within a 3 NM radius of the Lone Pine and Independence airports.

See Chapter 7, *R-2508 Complex Description and Use*, for more details concerning the following activities:

- Sailplane
- Ultralight
- · Hang gliders
- General aviation VFR Transit routes (see Figure 7-3)
- Land Management helicopters and fixed-wing aircraft
- Sequoia and Kings Canyon National Parks, and John Muir Wilderness Area (see Figure 7-4)
- Populated areas: Lone Pine, Independence, Olancha, Keeler (see Figure 7-6)
- Charted airports
- Little Lake Hunting Club

**NOTE:** Avoid establishing holding patterns and/or conducting ACM activities over communities within the Owens Valley.

#### 4.2.3 Dimensions

The dimensions of the **Owens MOA** are:

Beginning at 37°12'00"N/118°35'03"W; thence direct 37°12'00"N/118°26'03"W;

37°02'00"N/118°20'03"W; 37°09'00"N/118°00'03"W; 36°46'00"N/118°00'03"W; 36°14'00"N/117°36'03"W;

thence along the northern and western boundary of R-2505 to

36°08'00"N/117°53'03"W;

thence direct 36°08'00"N/118°35'03"W;

Thence direct to the point of beginning.

## The dimensions of the ATCAA are:

Beginning at 37°12'00"N/118°35'03"W; thence direct 37°12'00"N/118°00'03"W; thence direct 36°46'00"N/118°00'03"W; thence direct 36°14'00"N/117°36'03"W;

thence along the northern and western boundary of R-2505 to

36°08'00"N/117°53'03"W;

thence direct 36°08'00"N/118°35'03"W;

Thence direct to the point of beginning.

#### 4.3 Saline MOA/ATCAA

## 4.3.1 Description and Operations

The Saline MOA covers 200 feet AGL to FL180 and the ATCAA covers FL180 to FL600. Saline is typically used for the following activities:

- OT&E, RDT&E, ACM, and training by NAS Lemoore, NAWS China Lake, Fresno ANG, and Edwards AFB
- Low and high-altitude refueling activities (Saline Valley)
- Crossing of several MTRs (see Figure 4-2)
- Special platform aircraft orbits

### 4.3.2 Special Considerations

#### Aircraft use the China Lake local altimeter.

Altitudes do not include 3,000 feet AGL and below over Death Valley National Monument matching the line described below.

See Chapter 7, *R-2508 Complex Description and Use*, for more details about the following activities:

- Ultralight
- General aviation VFR Transit routes (see Figure 7-3)
- Land Management helicopters and fixed-wing aircraft
- Death Valley National Park (see Figure 7-5)
- Populated areas: Stove Pipe Wells, Furnace Creek (see Figure 7-6)
- Charted airports

**CAUTION:** Pay specific and careful attention to the ridge crossing at Hunter Mountain that divides the Panamint and Saline MOAs. The "saddle" on the ridgeline is a narrow passage between the MOAs and is served by VR1205, which inherently possesses a high potential for a head-on collision.

Use standard "rules-of-the-road" while approaching and passing through the saddle. Pilots should fly to the right side when passing through the saddle area. This helps prevent head-on collisions with aircraft passing in the opposite direction.

## 4.3.3 Dimensions

The dimensions of the Saline MOA and ATCAA are:

Beginning at	37°12'00"N/118°00'03"W;
thence direct	37°12'00"N/117°20'03"W;
thence direct	36°30'00"N/116°55'03"W;
thence direct	36°30'00"N/117°48'03"W;
thence direct	36°46'00"N/118°00'03"W;

Thence direct to the point of beginning.

# The line next to the Death Valley National Monument is:

Beginning at	37°01'19"N/117°13'39"W;
thence direct	37°01'19"N/117°13'50"W;
thence direct	37°05'01"N/117°18'54"W;
thence direct	37°05'05"N/117°33'47"W;
thence direct	36°58'57"N/117°33'47"W;
thence direct	36°58'56"N/117°34'05"W;
thence direct	36°53'55"N/117°34'11"W;
thence direct	36°53'51"N/117°35'16"W;
thence direct	36°51'10"N/117°35'16"W;
thence direct	36°51'08"N/117°36'20"W;
thence direct	36°47'58"N/117°36'18"W;
thence direct	36°47'51"N/117°37'07"W;
thence direct	36°40'21"N/117°37'08"W;
thence direct	36°40'21"N/117°36'03"W;
thence direct	36°37'45"N/117°36'05"W;
thence direct	36°37'45"N/117°31'44"W;
thence direct	36°36'52"N/117°31'44"W;
thence direct	36°36'56"N/117°30'53"W;
thence direct	36°36'38"N/117°30'26"W;
thence direct	36°36'31"N/117°29'54"W;
thence direct	36°35'54"N/117°29'43"W;
thence direct	36°35'27"N/117°28'59"W;
thence direct	36°35'29"N/117°28'41"W;
thence direct	36°34'21"N/117°28'32"W;
thence direct	36°33'29"N/117°28'45"W;
thence direct	36°32'39"N/117°30'16"W;
thence direct	36°31'56"N/117°30'08"W;
thence direct	36°31'29"N/117°28'20"W;
thence direct	36°30'16"N/117°25'34"W;
thence direct	36°30'00"N/117°25'35"W.

#### 4.4 Panamint MOA/ATCAA

## 4.4.1 Description and Operations

The Panamint MOA covers 200 feet AGL to FL180, and the ATCAA covers FL180 to FL600. Panamint is typically used for the following activities:

- Support of R-2502N, R-2502E, and R-2524 operations by Nellis AFB, NAWS China Lake, Fresno ANG, and Edwards AFB
- OT&E, RDT&E, ACM, low-altitude training, and large-scale exercises
- Crossing of several MTRs (see Figure 4-2)
- Low and high-altitude refueling

### 4.4.2 Special Procedures

Aircraft use the China Lake local altimeter.

The MOA excludes 1,500 feet AGL and below within a 3 NM radius of the Trona airport and 3,000 feet AGL and below over 1977 boundaries of Death Valley National Monument north and east of the line described below.

See Chapter 7, *R-2508 Complex Description and Use*, for more details about the following activities:

- Ultralight
- General aviation VFR Transit routes (see Figure 7-3)
- Land Management helicopters and fixed-wing aircraft
- Death Valley National Park (see Figure 7-5)
- Populated areas: Trona (see Figure 7-6)
- Charted airports
- Trona CFA/Trona Corridor
- Panamint Valley Mining (blasting)
- Severe Weather Area (4) (see subsection 3.2.1)

<u>CAUTION!</u> Pay specific and careful attention to the ridge crossing at Hunter Mountain that divides the Panamint and Saline MOAs. The "saddle" on the ridgeline is a narrow passage between the MOAs and is served by VR1205, which inherently possesses a high potential for a head-on collision.

Use standard "rules-of-the-road" while approaching and passing through the saddle. Pilots should fly to the right side when passing through the saddle area. This helps prevent head-on collisions with aircraft passing in the opposite direction.

#### 4.4.3 Dimensions

The dimensions of the **Panamint MOA** and **ATCAA** are:

Beginning at 36°30'00"N/117°48'03"W; thence direct 36°30'00"N/116°55'03"W; thence direct 35°34'30"N/116°23'33"W; thence along the northern boundary of R-2502N, the second street and the second street along the northern boundary of R-2502N, the second street along the northern boundary of R-2502N, the second street along the northern boundary of R-2502N, the second street along the second

thence along the northern boundary of R-2502N, the eastern, northern, and western boundaries of R-2524, and the northwestern boundary of R-2505 to

35°19'20"N/117°38'33"W;

thence direct 35°21'00"N/117°38'33"W; thence direct 35°39'15"N/117°29'26"W;

thence along the eastern and northern boundary of R-2505 to

36°14'00"N/117°36'03"W;

Thence direct to the point of beginning.

### The line next to the Death Valley National Monument is:

Beginning at	36°30'00"N/117°25'35"W;
thence direct	36°29'46"N/117°25'36"W;
thence direct	36°27'14"N/117°22'01"W;
thence direct	36°25'41"N/117°22'01"W;
thence direct	36°25'34"N/117°20'58"W;
thence direct	36°26'16"N/117°19'11"W;
thence direct	36°25'00"N/117°18'36"W;
thence direct	36°25'10"N/117°17'57"W;
thence direct	36°24'15"N/117°17'23"W;
thence direct	36°23'48"N/117°15'36"W;
thence direct	36°13'57"N/117°15'33"W;
thence direct	36°13'55"N/117°09'09"W;
thence direct	36°08'44"N/117°09'04"W;
thence direct	36°08'40"N/117°09'04"W;
thence direct	36°06'58"N/117°03'47"W;
thence direct	36°05'54"N/117°04'33"W;
thence direct	36°05'28"N/117°03'54"W;
thence direct	36°01'42"N/117°02'34"W;
thence direct	35°58'53"N/117°04'31"W;
thence direct	35°58'37"N/117°05'17"W;
thence direct	35°57'13"N/117°06'45"W;
thence direct	35°55'23"N/117°06'35"W;
thence direct	35°54'11"N/117°05'24"W;
thence direct	35°53'10"N/117°01'39"W;
thence direct	35°52'54"N/116°55'21"W;
thence direct	35°47'44"N/116°55'22"W;
thence direct	35°47'44"N/116°36'05"W;
thence direct	35°39'03"N/116°36'01"W;
thence direct	35°39'03"N/116°26'06"W.